WHAT IS CLAIMED IS:

1. A variable displacement compressor including a wobble body that is arranged in a crank chamber formed gastight, such that an inclination angle of the wobble body can be changed with respect to a rotating shaft, and is driven by rotation of the rotating shaft, for wobbling motion, and pistons connected to the wobble body, for performing reciprocating motion in a direction along axis in accordance with the wobbling motion of the wobble body, to thereby suck refrigerant from a suction chamber into a cylinder, compress the refrigerant, and deliver the compressed refrigerant from the cylinder to a discharge chamber,

the variable displacement compressor comprising:

a variable orifice arranged in a suction-side refrigerant passage leading to the suction chamber or a discharge-side refrigerant passage leading to the discharge chamber, such that an openness thereof can be set according to changes in external conditions;

a differential pressure regulating valve arranged at a desired location in a first refrigerant passage leading from the discharge chamber to the crank chamber, and a second refrigerant passage leading from the crank chamber to the suction chamber, for sensing a differential pressure generated across the variable orifice and adjusting an openness thereof such that the differential

pressure becomes equal to a predetermined value; and

a fixed orifice arranged at a desired location in the first refrigerant passage and the second refrigerant passage,

wherein a flow rate of refrigerant flowing into the suction chamber or a flow rate of the refrigerant discharged from the discharge chamber is caused to become substantially constant.

2. The variable displacement compressor according to claim 1, wherein the variable orifice is arranged in the suction-side refrigerant passage, the differential pressure regulating valve being arranged in the first refrigerant passage, and the fixed orifice being arranged in the second refrigerant passage.

3. The variable displacement compressor according to claim 1, wherein the variable orifice is arranged in the discharge-side refrigerant passage, the differential pressure regulating valve being arranged in the first refrigerant passage, and the fixed orifice being arranged in the second refrigerant passage.

4. The variable displacement compressor according to claim 1, wherein the variable orifice is an electromagnetic proportional flow rate control valve including a solenoid enabling the predetermined value to

be externally set by a current value.

5. The variable displacement compressor according to claim 4, wherein the electromagnetic proportional flow rate control valve is switched to a minimum operation in which the flow rate of refrigerant is reduced substantially to zero by setting the current value which can be externally set for the solenoid, to zero.

6. The variable displacement compressor according to claim 5, wherein the variable displacement compressor is applied to a clutchless air conditioning system for an automotive vehicle.